

## Hunters Point Excerpts from RODs

Parcel B ROD on background concentrations –

“226Ra is the only naturally occurring radionuclide of concern at Parcel B. 137Cs and 90Sr may be present in trace quantities because of fallout from nuclear weapons testing. The radiological dose and risk modeling considered the background concentration for radionuclides of concern other than 226Ra to be 0 picocuries per gram (pCi/g). The 226Ra background concentration was assumed to be the measured background level of 0.5 pCi/g.

The background concentrations of radionuclides of concern were assumed to be 0 disintegrations per minute (dpm) per 100 square centimeters for surfaces to model total risk from radiologically impacted buildings. This assumption was made because none of the radionuclides of concern are found in building materials, except for 226Ra which can be found in earthen materials (such as cement and ceramic tile).”

I interpret this to mean that, other than radium 226, the Parcel B ROD states that there are no background levels for other radionuclides because they are not naturally occurring (other than trace quantities of cesium 137 and strontium 90 from fallout). The ROD says that radium 226 background level was measured at .05 pCi/g; if this measuring was conducted by Tetra Tech, they could argue that it needs to be redone. For the other radionuclides, the ROD states that there is no background level; changing their background levels may require an ESD or ROD amendment. This would be consistent with the Parcel C ROD as well.

Parcel G ROD incorporating time critical removal action levels into ROD:

“In the event that the TCRA does not achieve its cleanup goals, cleanup will continue in accordance with the remedial action selected in this ROD until the RAOs are achieved.”

The ROD also sets the Remedial Action Objective for radionuclides: “1. Prevent exposure to radionuclides of concern in concentrations that exceed remediation goals for all potentially complete exposure pathways. Remediation goals for soil and groundwater and radiologically impacted sites are listed in Tables 4 and 5, respectively.” Thus, the RAO for radionuclides is to meet the RGs, so Derek’s argument about not needing to meet the RGs makes no sense.

Parcel G ROD on RGs for radionuclides and meeting standards:

“Remediation goals are consistent with those issued in the Radiological TCRA Action Memo. Remediation goals meet the 25 millirem per year residual dose level consistent with 10 CFR Section 20.1402. Furthermore, for most radionuclides of concern, goals meet the 15 millirem per year residual dose level consistent with the 1997 EPA OSWER Directive (OSWER No. 9200.4-18). Of exception is the goal for Thorium-232 goal which due to detection limit technical limitations, corresponds to a dose of 25 mrem/yr.”

Thus, the RGs were designed to meet the 25 mrem/yr standard for NRC as well as the risk range and the EPA OSWER directive that advised a 15 mrem/yr limit for ARARs. OSWER’s new

directive sets the standard at 12, but the RGs are already lower than all of those standards because they are based on the risk range.

Parcel G ROD basic remediation goal for radionuclides:

“Buildings, former building sites, and excavated areas will be surveyed after cleanup is completed to ensure that no residual radioactivity is present at levels above the remediation goals. Excavated soil, building materials, and drain material from radiologically impacted sites will be screened and radioactive sources and contaminated soil will be removed and disposed of at an off-site low-level radioactive waste facility.”